

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (Currently Amended) A dual polarized antenna comprising:

at least first and second substantially planar Vivaldi antenna elements; and

antenna element feeds; wherein, having

the antenna elements have active portions for receiving or radiating signals from a direction forward of the antenna; [[,]]

the antenna elements ~~having~~ have mutually intersecting planes; ~~and having~~

phase centers of the active portions of the antenna elements are substantially collocated ~~co-located~~; [[and]]

the antenna element feeds are coupled to the respective antenna elements, and extend to the respective antenna elements from [[at]] a position that is i) rearward ~~to the rear~~ of the active portions, and ii) displaced from an

axis extending through the phase centers and the intersection of the planes of the antennas; and [[.]]

each antenna element has a feed flare and an end flare, with a substantially constant slot section disposed therebetween.

Claim 2. (Currently Amended) An antenna as claimed in claim 1, further comprising ~~wherein the antenna elements include~~ an antenna feedline connected to the antenna element feeds at the position displaced from the axis.

Claim 3. (Original) An antenna as claimed in claim 2 wherein the antenna feedline crosses the axis.

Claim 4. (Original) An antenna as claimed in claim 3 wherein the antenna feedline comprises a stripline section and a twinline section.

Claims 5.-6. (Cancelled)

Claim 7. (Original) An antenna as claimed in claim 1 wherein the feedline includes a parallel section substantially parallel to the axis.

Claim 8. (Original) An antenna as claimed in claim 7 wherein the parallel section of the first element has substantially the same length as the constant slot section of the other element.

Claim 9. (Previously Presented) An antenna as claimed in claim 1 wherein the locus of effective phase centers of the elements are co-located.

Claim 10. (Original) An antenna as claimed in claim 1 wherein the antenna elements are joined by mutually engaging formations.

Claim 11. (Original) An antenna as claimed in claim 10 wherein the mutually engaging formations include slots made in the elements.

Claim 12. (Previously Presented) An antenna as claimed in claim 11 wherein the elements are formed by substrates and metallized layers.

Claim 13. (Original) An antenna as claimed in claim 1 wherein the first and the second elements have substantially matching end flares.

Claim 14. (Currently Amended) Radiowave receiving apparatus having an antenna, comprising:

at least first and second substantially planar Vivaldi antenna elements; and

antenna element feeds, wherein, having

the antenna elements have active portions for receiving or radiating signals from a direction forward of the antenna; [[,]]

the antenna elements ~~having~~ have mutually intersecting planes;  
~~and having~~

phase centers of the active portions of the antenna elements are  
substantially collocated ~~co-located~~; [[and]]

the antenna element feeds are coupled to the respective antenna  
elements, and extend to the respective antenna elements from [[at]] a position  
that is i) rearward ~~to the rear~~ of the active portions, and ii) displaced from an  
axis extending through the phase centers and the intersection of the planes of  
the antennas; and[[.]]

each antenna element has a feed flare and an end flare, with a  
substantially constant slot section disposed therebetween.

Claim 15. (Currently Amended) Radiowave transmitting apparatus  
having an antenna, comprising:

at least first and second substantially planar Vivaldi antenna  
elements; and

antenna element feeds; wherein, having

the antenna elements have active portions for receiving or radiating  
signals from a direction forward of the antenna; [[.]]

the antenna elements ~~having~~ have mutually intersecting planes;  
~~and having~~

phase centers of the active portions of the antenna elements are  
substantially collocated ~~co-located~~; [[and]]

the antenna element feeds are coupled to the respective antenna  
elements, and extend to the respective antenna elements from [[at]] a position  
that is i) rearward ~~to the rear~~ of the active portions, and ii) displaced from an  
axis extending through the phase centers and the intersection of the planes of  
the antennas; and [[.]]

each antenna element has a feed flare and an end flare, with a  
substantially constant slot section disposed therebetween.